

2176  
S/022/61/014/003/002/008  
D201/D304

Convergence of a Fourier ...

( $-L, L$ ) contains a complete real sub-quantity; b) a Fourier series of the function  $f(x)$  converges to  $\infty$  at each point of the quantity A,

$$\lim_{n \rightarrow \infty} \left( \frac{a_0}{2} + \sum_{k=1}^n a_k \cos kx + b_k \sin kx \right) = \infty$$

for all  $x \in A$ , where

$$a_k = \frac{1}{\pi} \int_{-\pi}^{\pi} f(t) \cos kt dt, \quad (k = 0, 1, 2, \dots)$$

$$b_k = \frac{1}{\pi} \int_{-\pi}^{\pi} f(t) \sin kt dt, \quad (k = 1, 2, \dots).$$

To prove this the author considers a positive series of number  $(\varepsilon_1)$  such that

Card 2/11

23718  
S/022/61/014/003/002/008  
D201/D304

Convergence of a Fourier ...

$$\sum_{i=1}^{\infty} \epsilon_i < +\infty. \quad (1)$$

A function  $f(x)$  and a quantity  $A$  for any values of  $a, b, x$  and  $n$  must be such that inequality

$$\left| \int_a^b \frac{\sin n(t-x)}{t-x} dt \right| < 2\pi. \quad (2)$$

is satisfied. The first step is denoted by  $\Delta_i^{(1)}$  an interval with center coinciding with zero point, which is situated inside of the range  $(-\pi, \pi)$ . Taking a closed interval  $\delta_1^{(1)}$ , situated inside another interval  $\Delta_1^{(1)}$  whose centers coincide with the centers of the former element, number  $n$  was selected in order to satisfy

Card 3/11

28718  
S/022/61/014/003/002/008  
D201/D304

Convergence of a Fourier ...

(4)

$$\frac{1}{\pi} \int_{-\pi}^{\pi} f_1^{(n)}(t) \frac{\sin n(t-x)}{t-x} dt > \frac{1}{2} \quad \begin{matrix} \text{for} \\ \text{HppH} \end{matrix} \quad x \in \delta_1^{(n)}, \quad n \geq n_1.$$

The author next considers the step of the  $i$ -th order. Assuming that junction

$$f_k^{(i)}(x) \quad (1 \leq k \leq k_i)$$

determined for intervals  $\Delta_k^{(i)}$  is such that for the closed intervals  $\delta_k^{(i)} \subset \Delta_k^{(i)}$  ( $1 \leq k \leq k_i$ ) and for a selected natural number  $n_i$ , that satisfies the following conditions: 1) The intervals  $\Delta_k^{(i)}$  are contained in pairs in the range  $(-\pi, \pi)$  do not intersect, and have no common ends. 2)  $\delta_k^{(i)} \subset \Delta_k^{(i)}$  and the center of the inter-

Card 4/11

S/022/61/014/003/002/008  
D201/D304

Convergence of a Fourier ...

val  $\Delta_k^{(i)}$  ( $1 \leq k \leq k_i$ ). 3)

$$3) f_k^{(i)}(x) = \begin{cases} 1, & \text{при } x \in \Delta_k^{(i)}, \\ 0, & \text{при } x \notin \Delta_k^{(i)}; \end{cases} \quad (5)$$

$$4) \frac{1}{\pi} \int_{-\pi}^{\pi} f_k^{(i)}(t) \frac{\sin n(t-x)}{t-x} dt > \frac{1}{2} \quad \text{при } x \in \delta_k^{(i)}, n > n_i. \quad (6)$$

Functions of the  $i$ -th order are determined by the fact that intervals  $\delta_k^{(i)}$  ( $1 \leq k \leq k_i$ ) and their completing intervals constitute a quantity  $(-\pi, \pi) - \sum_{k=1}^{k_i} \delta_k^{(i)}$ . Moreover, a) the intervals  $\Delta_k^{(i+1)}$  in pairs do not intersect and have no common end; b) For

Card 5/11

S/022/61/014/003/002/008  
D201/D304

Convergence of a Fourier ...

each  $k$  ( $1 \leq k \leq k_{i+1}$ ) inequality

$$\left| \frac{1}{\pi} \int_{-\pi}^{\pi} f_k^{(i+1)}(t) \frac{\sin n(t-x)}{t-x} dt \right| < \frac{\epsilon_{i+1}}{k_{i+1}} \quad (7)$$

holds for any  $x \in \Delta^{(i+1)}$ ,  $j \neq k$ ; c) For each  $k$  there is an inequality

$$\left| \frac{1}{\pi} \int_{-\pi}^{\pi} f_k^{(i+1)}(t) \frac{\sin n(t-x)}{t-x} dt \right| < \frac{\epsilon_{i+1}}{k_{i+1}} \quad (8)$$

for any  $x \in (-\pi, \pi)$  and  $1 \leq n \leq n_i$  we have d)

$$\sum_{k=1}^{k_{i+1}} \left( \int_{-\pi}^{\pi} |f_k^{(i+1)}(x)|^p dx \right)^{1/p} < \epsilon_{i+1}. \quad (9)$$

Card 6/11

2718  
S/022/61/014/003/002/008  
D201/D304

Convergence of a Fourier ...

Taking inside each of the intervals  $\Delta_k^{(i+1)}$ , a closed interval  $\delta_k^{(i+1)}$  whose center coincides with the center of  $\Delta_k^{(i+1)}$  and selecting a natural number  $n_{(i+1)}$  such that e)  $n_{i+1} > n_i(10)$ ; f)

$$\frac{1}{\pi} \int_{-\pi}^{\pi} f_k^{(i+1)}(t) \frac{\sin n(t-x)}{t-x} dt > \frac{1}{2} \quad (11)$$

at

$$x \in \delta_k^{(i+1)}, n > n_{i+1} \quad (k = 1, 2, \dots, k_{i+1}).$$

g)  $\delta_n^{(i)} \subset \Delta_k^{(i)}$ ,  $1 \leq k \leq k_i$ ; and there are inside each interval  $\delta_k^{(i)}$  two intervals  $\delta_{jk}^{(i+1)}, \delta_{jk+1}^{(i+1)}$  of the group  $i+1$ , where  $1 \leq jk \leq k_{i+1}$ . The rest of the intervals of the  $i+1$  group are assumed to be outside  $\delta_k^{(i)}$ . It is shown to follow from condition g) that there exists a univalued series of inserted intervals, beginning with an

Card 7/11

S/022/61/014/003/002/008  
D201/D304

Convergence of a Fourier ...

interval of the group  $i_0$ , for which the number  $x_0$  represents a common point for all intervals of this series

$$\delta_{v_{i_0}}^{(i_0)}, \delta_{v_{i_0+1}}^{(i_0+1)}, \dots \delta_{v_i}^{(i)}, \dots,$$

(15)

where

$$1 \leq v_i \leq k_i, \quad i = i_0 + 1, \quad i_0 + 2, \dots$$

(16)

$$\delta_{v_{i_0}}^{(i_0)} \supset \delta_{v_{i_0+1}}^{(i_0+1)} \supset \dots \supset \delta_{v_i}^{(i)} \supset \dots$$

(17)

$$x_0 \in \delta_{v_j}^{(j)}, \quad j = i_0, \quad i_0 + 1, \dots$$

The author examines expression

(20)

$$\sum_{i=i_0}^{\infty} \sum_{k=1}^{k_i} \frac{1}{\pi} \int_{-\pi}^{\pi} f_k^{(i)}(t) \frac{\sin n(t - x_0)}{t - x_0} dt.$$

Card 8/11

22718

S/022/61/014/003/002/008

D/201/D304

Converg. nce of a Fourier ...

assuming, that  $n$  is a natural number greater than  $n_{i_0} + 1$  and  $j > i_0$   
 $+ 1$ ,  $n_j \leq n \leq n_{j+1}$  for the conditions c), e), f). From condition b)  
and  $\delta_k^{(i)} \subset \Delta_k^{(i)}$  (condition g) and considering (17), there follows

$$\left| \sum_{k \neq i} \frac{1}{\pi} \int_{-\pi}^{\pi} f_k^{(i)}(t) \frac{\sin n(t - x_0)}{t - x_0} dt \right| \leq \varepsilon_i \quad (22)$$

for all  $n = 1, 2, \dots; i \geq i_0$ .Further  $i_0 \leq i \leq j$ ,  $n_j \leq n \leq n_{j+1}$  (21), (17) and conditions e), f)

$$\frac{1}{\pi} \int_{-\pi}^{\pi} f_i^{(i)}(t) \frac{\sin n(t - x_0)}{t - x_0} dt \geq \frac{1}{2}. \quad (23)$$

It follows from (21) and conditions c), e) that

Card 9/ 11

2 712

S/022/61/014/003/002/008

D201/D304

Convergence of a Fourier ...

$$\left| \frac{1}{\pi} \int_{-\pi}^{\pi} f_{n_i}^{(i)}(t) \frac{\sin n(t - x_0)}{t - x_0} dt \right| < \varepsilon_i. \quad (26)$$

From the construction of the intervals  $\Delta_k^i (l \leq k \leq k_i)$   $i = 1, 2 \dots$ , it follows that inside each of the intervals  $\delta \subset (-\pi, \pi)$  there are some intervals  $\Delta_{\mu_{i_0}}^{(i_0)} (1 \leq \mu_{i_0} \leq k_{i_0})$ . Then  $\delta_{\mu_{i_0}}^{(i_0)} \subset \delta$ . From condition g it follows that

$$\eta_{\mu_{i_0}}^{(i_0)} \cdot \prod_{i=i_0+1}^{\infty} (\delta_1^{(i)} + \delta_2^{(i)} + \dots + \delta_{k_i}^{(i)})$$

which is not an empty quantity and proves the theorem. It is possible to determine a function  $f(x)$  such that it would belong simultaneously to all classes  $L_p(-\pi, \pi)$ ,  $p \geq 1$ . Also, for any quickly

Card 10/11

23718

S/022/61/014/003/002/008

D201/D304

Convergence of a Fourier ...

rising monotonic function  $\varphi(u)$ , determined in  $(0, +\infty)$ , it is possible to determine a function  $f(x)$  and to prove that a Fourier series can be convergent in  $+\infty$  for a number having a real portion in any interval  $\delta \subset (-\pi, \pi)$ . There is 1 Soviet-bloc reference.

ASSOCIATION: Institut matematiki i mehaniki AN Armyanskoy SSR  
(Institute of Mathematics and Mechanics. Armenian AS  
USSR) ✓

SUBMITTED: February 16, 1961

Card 11/11

MERGELYAN, S.N., akademik; TALALYAN, A.A.

One class of point discontinuous functions. Dokl. AN Arm. SSR  
(MIRA 14:8)  
32 no.4:183-187 '61.

1. Yerevanskiy universitet i Institut matematiki i mekhaniki  
Akademii nauk Armyanskoy SSR. 2. Akademiya nauk Armyanskoy  
SSR (for Mergelyan).  
(Functions, Discontinuous) (Aggregates)

TALALYAN, A.A. (Yerevan)

Representation of measurable functions by integrals having kernels  
of unitary transformations of  $L_2(0,\infty)$  space. Mat.sbor.53 no.3:287-312  
Mr '61. (MIRA 14:3)

1. Institut matematiki i mekhaniki AN ArmSSR.  
(Integral equations)

TALALYAN, A.A.

Existence of a trigonometric series universal with respect to its  
subseries. Dokl.AN SSSR 138 no.2:317-319 My '61. (MIRA 14:5)

1. Institut matematiki i mekhaniki Akademii nauk ArmSSSR. Predstavleno  
akademikom M.V.Keldyshem.  
(Fourier's series)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

TALALYAN, A. A.

"Representations of measurable functions by trigonometrical  
series"

report submitted at the Intl Conf of Mathematics, Stockholm, Sweden,  
15-22 Aug 62

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1"

TALALYAN, A.A. (Yerevan)

Limiting functions of series associated with bases of  $L_p$  space.  
Mat.sbor. 56 no.3:353-374 Mr '62.  
(Fourier's series) (Spaces, Generalized)

TALALYAN, A. A.

Dissertation defended for the degree of Doctor of Physicomathematical Sciences at the Mathematical Institute imedi V. A. Steklova 1962:

"Representation of Measurable Functions of Orthogonal Series and Series Based on L<sub>p</sub> Space."

Vest. Akad. Nauk SSSR. No. 4, Moscow, 1963, pages 119-145

TALALYAN, A.A.

Trigonometric series universal with respect to the subseries.  
Izv. AN SSSR Ser. mat. 27 no.3:621-660 My-Je '63.  
(MIRA 16:6)  
1. Institut matematiki i mekhaniki AN Armyanskoy SSR.  
(Fourier series)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

TALALYAN, A.A.

Complete systems of absolute convergence in a weak sense. Izv.  
AN SSSR. Ser. mat. 28 no.3:713-720 My-Je '64. (MIRA 17;6)

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CIA-RDP86-00513R001754730003-1"

ACCESSION NR: AP4033686

S/0039/64/063/004/0620/0638

AUTHOR: Talalyan, A. A. (Yerevan)

TITLE: Transposed trigonometric systems which are systems of convergence in the weak sense

SOURCE: Matematicheskiy sbornik, v. 63, no. 4, 1964, 620-638

TOPIC TAGS: trigonometric system, transposed system, system of convergence, Lusin hypothesis

ABSTRACT: Theorem: there exists a transposed trigonometric system

 $\{1, \cos v_k x, \sin v_k x, k = 1, 2, \dots\}$  (1)

with the following properties: 1) The Fourier series of a certain function  $f(x) \in L_2[-\pi, \pi]$  from system (1) diverges almost everywhere on  $[-\pi, \pi]$ . 2) For each function  $f(x) \in L_2[-\pi, \pi]$  and for any positive number  $\varepsilon$  one can determine a function  $\psi(x) \in L_2[-\pi, \pi]$  such that  $\text{mes } E[f(x) \neq \psi(x)] > \varepsilon$  and the Fourier series of the function  $\psi(x)$  from system (1) converges almost everywhere on  $[-\pi, \pi]$ .

Theorem: There exists a series

Card 1/3

ACCESSION NR: AP4033686

$$a_0 + \sum_{k=1}^{\infty} a_k \cos \mu_k x + b_k \sin \mu_k x, \quad (2)$$

where  $\mu_k$ ,  $k = 1, 2, \dots$ , are pairwise distinct natural numbers, which has the following properties: a) for a sequence of natural numbers  $k_1 < k_2 < \dots < k_n < \dots$  the series

$$\sum_{l=1}^{\infty} a_{k_l} \cos \mu_{k_l} x + b_{k_l} \sin \mu_{k_l} x, \quad (3)$$

composed of corresponding terms of the series (2), diverges unboundedly almost everywhere on  $[-\pi, \pi]$ , and

$$\sum_{l=1}^{\infty} a_{k_l}^2 + b_{k_l}^2 < +\infty; \quad (4)$$

b) for any function  $f(x) \in L_2[-\pi, \pi]$  and for any  $\varepsilon > 0$  there exists a function  $\psi(x) \in L_2[-\pi, \pi]$  and a sequence of natural numbers  $n_1 < n_2 < \dots$ , such that  $\text{mes E}[\psi(x) \neq f(x)] < \varepsilon$  and the series

Card 2/3

ACCESSION NR: AP4033686

$$\sum_{l=1}^{\infty} a_{n_l} \cos \mu_{n_l} x + b_{n_l} \sin \mu_{n_l} x, * \quad \sum_{l=1}^{\infty} a_{n_l}^2 + b_{n_l}^2 < +\infty, \quad (5).$$

converges to  $\psi(x)$  almost everywhere on  $[-\pi, \pi]$ . Orig. art. has: 100 formulas.

ASSOCIATION: none

SUBMITTED: 03Apr63

DATE ACQ: 07May64

ENCL: 00

SUB CODE: MA

NO REF Sov: 007

OTHER: 003

Card 3/3

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

ARUTYUNYAN, F.G.; TALALYAN, A.A.

Uniqueness of series according to Haar's and Walsh's systems.  
Izv. AN SSSR. Ser. mat. 28 no.6:1391-1408 N-D '64. (MIRA 18:2)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1"

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

TALALYAN, A.A.; ARUTYUNYAN, F.G. (Yerevan)

Convergence of series according to Haar's system  $k \rightarrow \infty$ .

Mat. sbor. 66 no.2:240-247 F '65.

(MIPA 18:4)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1"

Skaljarka, 1970. 10. 10. 1970. 10. 10.

Mening om utveckling i tekniken för elektricitetsproduktion och förslag till  
förbättringar i tekniken för överföring av elektricitet från kraftverk till  
motordrivna fordon. (MTR 18:8)

BARATOV, Georgiy Fedorovich; SOKOLENKO, I.P., red.; TALAN, F.S.,  
red.; CHUCHUPAK, V.D., tekhn. red.

[Population protection in an atomic, chemical, and  
bacteriological war] Zashchita naseleniya v usloviakh prime-  
neniya atomnogo, khimicheskogo i bakteriologicheskogo oru-  
zhiiia. Pod obshchei red. I.P. Sokolenko. Kiev, Gosmedizdat,  
1962. 423 p. (MIRA 16:2)

(Russia—Civil defense)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

KOTOV, A.I., podpolkovnik meditsinskoy sluzhby; TALAN, F.F.;  
VOLYNETS, M.I.

Content of vitamin C in soldiers' rations. Voen.-med. zhur.  
no.3:53-55 '65. (MIRA 18:10)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1"

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

LIRKHORADOV, A.P.; ENTIN, I.I.; TALAN, G.I.

Improving the quality of sinter is an important potentiality  
for increasing iron production. Met. i gornorud. prom. no.1;  
15-18 Ja-F '64. (MIRA 17;10)

APPROVED FOR RELEASE: 07/13/2001

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"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

TALANCHUK, Ye.S. (Smolikamsk, Molotovskoy oblasti, Pervomayskiy per.  
d.4, kv.2)

Case of Crohn's disease. Vest.khir. 78 no.2;126-217 F '57.  
(MLRA 10:3) \*  
(ILEITIS, REGIONAL, case reports (Rus))

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1"

KASPAR, Jan; TALANDOVA, Marie

Arsenic, material for mineralogy of Bohemia. Sbor chem tech 4 no.1:  
217-222 '60. (EEAI 10:9)

1. Katedra mineralogie, Vysoka skola chemicko-technologica, Praha.

(Arsenic) (Mineralogy)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

TALANDOVA, Marie; KRAL, Richard

Pyrrothine deposit in Obri Dul. Sbor chem tech 4 no.1:363-375 '60.  
(EEAI 10:9)

1. Katedra mineralogie, Vysoka skola chemicko-technologicka a Ustav  
anorganicke chemie, Ceskoslovenska akademie ved.

(Pyrrothine)

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CIA-RDP86-00513R001754730003-1"

TALANIN, F.

Gas heating of retorts in alcohol and powder plants.  
Prom. koop. no.12:25-26 D '56.

(MLRA 10:2)

1. Inzhener upravleniya khimicheskoy i lesokhimicheskoy  
promyshlennosti Rospromsoveta.  
(Distilling industries)

TALANIN, F.A.

Converting wood alcohol and wood products plants from wood to  
gas fuel. Gidroliz. i lesokhim.prom. ll no.7:24-27 '58.  
(MIRA 11:11)

1. Upravleniye khimicheskoy i lesokhimicheskoy promyshlennosti  
Rospromsoveta.  
(Wood-using industries--Equipment and supplies) (Gas as fuel)

TALANIN, F.

Conversion of alcohol and calcium acetate plants to gas fuel.  
Prom.koop. 13 no.8:12-13 Ag '59. (MIRA 12:12)

1. Starshiy inzhener upravleniya khimicheskoy i lesokhimicheskoy promyshlennosti Respromsoveta.  
(Gas as fuel) (Calcium acetate)  
(Methanol)

TRANSLATED BY

BUKOV, A., and SAKHAROV, G.

"Effect of Radiation on the Surface of Metal Oxide Crystals."

Paper submitted for presentation at Fourth Int'l Conference on Electrochemical Physics, Leningrad, USSR, 1-17 Sep 58.

Physical Technical Institute, USSR Academy of Sciences, Leningrad.

2-1,000, 121. 2p. 262 58.

BROM, I.P.; TALANIN, N.I.

Method of calculating the density of tarbagan burrows and their  
entrances. Izv. Irk.gos.protivochum. inst. 10:1320160 '52.  
(BORZYA DISTRICT--MARMOTS) (MIRA 10:12)  
(ANIMALS, HABITATIONS OF)

*TALANIN YU. N.*

*P/S*

Experiments with an electron and ion microscope. A. P. Kumar and Yu. N. Talanin (Leningrad Phys. Tech. Inst. Acad. Sci. U.S.S.R.). *Izvest. Akad. Nauk S.S.R., Ser. Fiz.*, 20, 1137-41 (1966). — A continuously evacuated electron projector had a W point emitter. Some observations can be made in spite of relatively bad ( $10^{-2}$ – $10^{-3}$  mm.) vacuum conditions. A model and photographs are given for the most frequent crystal orientation in the W point. This form is close to the rhombododecahedral (011) cut by the planes (001), (111), and (112). This form is close to the equil.-form with min. surface energy; it rarely appears under good vacuum conditions, but it is easily obtained in atm. contg. C in the form of oil pump vapor. In strongly contaminated W and Mo points the formation of hexagonal WC and  $Mo_2C$  was observed. The (0001) plane of the carbide coincided with the (011) plane of the W and Mo single crystals. Other observations were made on the movement of adsorbed films on the W surface. S.P.

*25*

*N.Y.*

TALAEV, Yu.N., <sup>and</sup> S. N. Mati <sup>and</sup> others "Formation of carbides on monocrystalline tungsten and molybdenum <sup>from</sup> observations in electron and ion projectors." Len, 1956, 11: (Len Inst Tech Inst of Acad Sci USSR) 10 copies (LB, 27-10, 103)

AUTHORS:

Komar, A. P., Talanin, Yu. N.

48-22-5-14/22

TITLE:

Pictures of Autoelectronic Emission of Crystals of Tungsten Carbide and Molybdenum Carbide (Kartiny avtoelektronnoy emissii kristallov karbidov vol'frama i molibdена) Data on the VIII All Union Conference on Cathode Electronics (Materialy VIII Vsesoyuznogo soveshchaniya po katodnoy elektronike, Leningrad, 17-24 oktyabrya 1957 g.)

PERIODICAL:

Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1958,  
Vol. 22, Nr 5, pp. 580 - 593 (USSR)

ABSTRACT:

The authors repeatedly observed in the projector of a field electron microscope (Reference 1-3) a hexagonal-symmetrical picture originating (rarely) from a tungsten tip or (repeatedly) a molybdenum tip. This seemed peculiar as both metals have a body-centered (cubic) lattice. Considering the not very good quality of the vacuum and the possible carbon-containing contamination, the authors expressed the assumption that the picture in question originates from the carbides  $W_2C$  and  $Mo_2C$  which are formed on the tungsten-and molybdenum-monocrystals and are of a hexagonal structure (Reference 6). As it was not

Card 1/3

Pictures of Autoelectronic Emission of Crystals of  
Tungsten Carbide and Molybdenum Carbide

48-22-5-14/22

possible to confirm this latter assumption, the investigations on the carbides mentioned were continued. The photographs taken earlier by the authors and by A. P. Kuritsyna were analysed more carefully. The ~~unpublished~~ series mentioned above were removed and another projector (figure 1) was used. The results leave no doubt that the observed hexagonal crystal presents a carbide of the described metals. It is now to be determined which carbide it is. Structure and position of the metal and the carbon atom is shown in figure 6. Therefrom the angles were calculated, which are formed by the axis "c" with the verticals to the most probable facets of both the lattice planes ( $11\bar{2}0$ ) and ( $1\bar{1}00$ ). Figure 7 shows the calculation results in diagrams. From the results the authors assume that the carbides are  $W_2C$  and  $Mo_2C$ . This is being confirmed in reference 13. The authors cannot understand the absence of the carbides  $WC$  and  $MoC$ , which should be present at the formation of  $W_2C$  and  $Mo_2C$ . The nature of the cubic, "rib-bearing" crystal is not clear either, which often preceded the hexagonal crystal. I. L. Sokol'skaya, B. G.

Card 2/3

Pictures of Autoelectronic Emission of Crystals of  
Tungsten Carbide and Molybdenum Carbide

48-22-5-14/22

Smirnov, N. A. Gorbatyy, G. N. Shuppe and the two authors  
took part in the discussion of this paper. There are 11 figures,  
1 figure and 20 references, 12 of which are Soviet.

ASSOCIATION: Leningradskiy fiziko-tehnicheskiy institut Akademii nauk SSSR  
(Leningrad Physical-Technical Institute AS USSR)

- 1. Single crystals--Analysis
- 2. Crystals--Lattices--Analysis
- 3. Tungsten carbide crystals--Analysis
- 4. Molybdenum carbide crystals  
--Analysis
- 5. Electron microscopes--Applications
- 6. Secondary  
emission

Card 3/3

STARODUBTSEV, S.V., akademik, otv. red.; ABDULLAYEV, A.A., kand. fiz.-mat. nauk, red.; ARDURASULOV, D.M., doktor med. nauk, red.; ARIFOV, U.A., akademik, red.; BORODULINA, A.A., kand. biol. nauk, red.; IVASHEV, V.N., red.; IKRAMOVA, G.S., red.; KIV, A.Ye., red.; LOBANOV, Ye.M., kand. fiz.-mat. nauk, red.; NIKOLAYEV, A.I., kand. med. nauk, red.; NISHANOV, D., kand. khim. nauk, red.; SADYKOV, A.S., akademik, red.; TALANIN, Yu.N., kand. fiz.-mat. nauk, red.; TURAKULOV, Ya.Kh., doktor biol. nauk, red.; KHAMIDOV, R.I., red.; BABAKHANOVA, A.G., tekhn. red.

[Works of the Tashkent Conference on the Peaceful Uses of Atomic Energy] Trudy Tashkentskoi konferentsii po mirnomu ispol'zoveniiu atomnoi energii, Tashkent, 1959. Tashkent. Vol.2. 1960. 449 p.  
(MIRA 14:5)

1. Tashkentskaya konferentsiya po mirnomu ispol'zoveniyu atomnoy energii, Tashkent, 1959. 2. Akademiya nauk Uzbekskoy SSR (for Starodubtsev, Arifov, Sadykov). 3. Institut yadernoy fiziki AN UzSSR (for Abdullayev, Ivashev). 4. Chlen-korrespondent AN SSSR (for Sadykov)

(Atomic energy--Congresses)

TURANULOV, Ya.Kh., doktor biolog. nauk, otv. red.; ABDULLAYEV, A.A., kand. fiz.-mat. nauk, red.; ABDURASULOV, D.N., doktor med. nauk, red.; ARIFOV, U.A., akademik, red.; BOGDULINA, A.A., kand. biol. nauk, red.; IVASHEV, V.N., red.; IKHANOVA, G.S., red.; KIV, A.Y., red.; LOBANOV, Ye.M., kand.fiz.-mat. nauk, red.; NIKOLAYEV, A.I., kand. med. nauk, red.; NISHANOV, D., kand. khim. nauk, red.; SADYKOV, A.S., akademik, red.; STARODUBTSEV, S.V., akademik, red.; TALANTIN, Yu.N., kand. fiz.-mat. nauk, red.; GORKOVYI, P.I., red.; GOR'KOVAYA, Z.P., tekhn. red.

[Transactions of the Tashkent Conference on Peaceful Uses of Atomic Energy] Trudy Tashkentskoy konferentsii po mirnomu ispol'zovaniyu atomnoi energii, Tashkent, 1959. Vol.3. 1961.  
(MIRA 15:3)  
5(1 p.)  
1. Tashkentskaya konferentsiya po mirnomu ispol'zovaniyu atomnoy energii, Tashkent, 1959. 2. Akademika nauk Uzbekskoy SSR (for Arifov, Sadykov, Starodubtsev).  
(Atomic energy--Congresses)

STARODUBTSEV, S.V., akad., otv. red.; ABDULLAYEV, A.A., kand. fiz.-mat. nauk, red.; ABDUMASULOV, D.M., doktor med. nauk, red.; ARIFOV, U.A., akad., red.; BOGDULINA, A.A., kand. biol. nauk, red.; IVASHEV, V.N., red.; IKRAMOVA, G.S., red.; KIV, A.Ye., red.; LOBANOV, Ye.M., kand. fiz.-mat. nauk, red.; NIKOLAYEV, A.I., kand. med. nauk, red.; NISHANOV, D., kand. khim. nauk, red.; SADYKOV, A.S., akad., red.; TALANIN, Yu.N., kand. fiz.-mat. nauk, red.; TURAKULOV, Ya.Kh., doktor biol. nauk, red.; GAYSINSKAYA, I.G., red.; GOR'KOVAYA, Z.F., tekhr. red.

[Transactions of the Tashkent Conference on the Peaseful Uses of Atomic Energy] Trudy Tashkentskoy konferentsii po mirnomu ispol'zovaniyu atomnoi energii, 1959. Tashkent, Izd-vo Akad.nauk Uzbekskoi SSR. Vol.1. 1961. 410 p. (MIRA 15:5)

1. Tashkentskaya konferentsiya po mirnomu ispol'zovaniyu atomnoy energii, Tashkent, 1959. 2. Akademiya nauk Uzbekskoy SSSR (for Starodubtsev, Arifov, Sadykov). 3. Chlen-korrespondent Akademii nauk SSSR (for Sadykov). 4. Institut yadernoy fiziki Akademii nauk Uzbekskoy SSR (for Arifof, Lobanov). 5. Institut krayevoy eksperimental'noy meditsiny Akademii nauk Uzbekskoy SSR (for Turakulov).

(Atomic energy--Congresses)

TALANIN, Yu.N., otv. red.; BAKLITSKAYA, A.V., red.; ULAN, V.F.,  
red.; GOR'KOVAYA, Z.P., tekhn. red.

[Radiation effects in solids] Radiatsionnye effekty v tver-  
dykh telakh. Tashkent, Izd-vo Akad. nauk UzSSR, 1963. 164 p.  
(MIRA 16:7)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut yadernoy  
fiziki. (Solids, Effect of radiation on)

TALANIN, Yu.N., kand. fiz.-matem. nauk, otv. red.; YENGALYCHEVA,  
D.Z., red.

[Radiation effects in condensed media] Radiatsionnye ef-  
fekty v kondensirovannykh sredakh. Tashkent, Izd-vo  
"Nauka" Uzbekskoi SSR, 1964. 149 p. (MIRA 17:6)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut yadernoy  
fiziki.

25

CH TALANINA, A-S.

Dye penetration of cotton fabrics. A. S. Filatina and N. A. Milinskii. *Tekstil. Prom.* 1949, №7-10, 26-9. --The force opposing the penetration of dye liquor into a cotton yarn is calc'd. in terms of surface tension and angle of wetting. The great increase in this force when the yarn is woven into a fabric is shown. A process to overcome this and ensure penetration of heavy tent fabrics is described. The fabric is dyed in a continuous dyeing machine fitted with a vacuum box, with continuous circulation of dye liquor and avoiding tension of the fabric. R.A.

BORODIN, A.I.; TALANINA, A.S.; ARKHIPOVA, T.N.

Let us improve the assortment of cotton fabrics. Tekst.prom.<sup>14</sup>  
no.3:9-10 Mr '54. (MLRA 7:5)  
(Cotton fabrics)

TALANINA, A.S., nauchnyy sotrudnik.

New fabrics for raincoats. Nauka i zhizn' 21 no.1:35 Ja '54.  
(MLRA 7:1)

1. Tsentral'nyy nauchno-issledovatel'skiy institut khlopcatobumash-  
noy promyshlennosti.  
(Waterproofing of fabrics) (Textile industry)

SOKOLOV, G.V., inzh.; LABUZOVA, Z.I.; GENKINA, M.L.; RAKHLINA, S.S., kand.tekhn.  
nauk; SHATROVA, Ye.S., kolorist 1-y kategorii; TALANINA, A.S., kolorist  
1-y kategorii; TANVEL', A.Ya., kand.tekhn.nauk

"Processing of artificial fibers" Translation from the English  
by D.I.Venediktova, K.K.Lupandina. Book review by G.V.Sokolov  
and others. Tekst.prom. 19 no.2:71-73 F '59. (MIRA 12:5)  
(United States--Textile fibers, Synthetic) (Technology--Translating)  
(Venediktova, D.I.) (Lupandina, K.K.)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1"

TALANINA L.KH.  
EXCERPTA MEDICA Sec.2 Vol.11/3 Physio-biochem. Mar 58

1280. IRRADIATION AND CONCENTRATION OF THE INHIBITORY PROCESS  
UNDER DIFFERENTIATION AND CONDITIONED INHIBITION IN DOGS WITH  
VARIOUS TYPES OF NERVOUS SYSTEM (Russian text) - Talanina L.Kh.  
- ZH. VYSSHEI NERV. DEIAT. 1957, 7/2 (272-277) Tables 2

The peculiarities of irradiation and concentration of the inhibitory process under differentiation and conditioned inhibition (in the auditory and optical analysors) in dogs with various specified types of nervous system, were studied in 6 dogs. Observations were made daily, at the same hours, in accordance with the classical Pavlov salivary method of conditioned reflexes. In dogs with a weak type of the nervous system, irradiation and concentration of the inhibitory process under differentiation and conditioned inhibition proceeds more slowly than in dogs of the strong type. A dog of the strong variation of the weak type occupies an intermediate position between the above groups as to the rate of these processes. At the beginning of the elaboration of conditioned inhibitory reflexes, successive inhibition is deeper and more lasting in dogs with a nervous system of the sanguine type than in dogs of the strong unequilibrated type. As differentiation and conditioned inhibition become stable, concentration of the inhibitory process is observed to a greater extent in dogs of the strong nervous system type than in dogs of the weak type. The spreading of the inhibitory process under differentiation and conditioned inhibition to the positive conditioned reflex of another analyzer is greater in dogs of the weak nervous system type than in dogs of the strong type. The degree of successive inhibition depends on the correlations between the physical strength of the interacting inhibitory and positive conditioned stimuli.

SOV/112-57-5-10522

8 (2)

Translation from: Referativnyy zhurnal. Elektrotehnika, 1957, Nr 5, p 142 (USSR)

AUTHOR: Samoylo, K. A., Talanina, N. V., Meshchankina, A. Ye..

Bogachev, I. D.

TITLE: Method for Precision Measurement of Phase Difference  
(Metod tochnogo izmereniya raznosti faz)

PERIODICAL: Tr. Mosk. energ. in-ta, 1956, Nr 21, pp 89-99

ABSTRACT: Methods of precision measurement of phase difference, which are based on the multiplication of frequency of the process in question, are considered. It is pointed out that the accuracy of measuring the phase-shift angle increases n times, where n is the frequency multiplication factor. A number of such schemes are considered; a scheme with a two-channel frequency multiplication, a scheme with a switch and an auxiliary frequency multiplication channel, and a scheme with a switch but without the auxiliary multiplication channel. Two latter methods use an electron-beam tube as an

Card 1/2

SOV/112-57-5-10522

Method for Precision Measurement of Phase Difference

output indicator; a round sweep is formed on the screen and readings are taken by marking time. In one case, a sweep frequency is  $\omega$  and the phase shift between time pulses is  $n(\varphi_1 - \varphi_2)$ ; in another case, the sweep frequency is  $n\omega$  and the pulse phase shift is  $(\varphi_1 - \varphi_2)$ . On the grounds of analysis of errors associated with the above schemes, the inference is drawn that the scheme with a switch but without the auxiliary multiplication channel is the most acceptable. A block diagram of a wide-band phasemeter with a frequency converter is presented.

V.G. Zh.

Card 2/2

SAMOYLO, K.A., kand. tekhn. nauk, dots.; TALANINA, N.V., inzh.

Additional error in the measurement of phase difference which arises in frequency multipliers. Trudy MZI no.31:55-68 '56 (MZhA 13:3)  
(Frequency multipliers)

SAMOYLO, K.A.; TALANINA, N.V.

Determining the instantaneous value of the resistance phase of a coil  
in a parallel oscillator circuit by the phase-plane method. Izv. vys.  
ucheb. zav.; radiotekh. no.3:362-372 My-Je '58. (MIRA 11:7)

1. Rekomendovana kafedroy osnov radiotekhniki Moskovskogo  
energeticheskogo instituta.  
(Radio circuits)

16.9540

S/112/59/000/012/080/097  
A052/A001

Translation from: Referativnyy zhurnal, Elektrotehnika, 1959, No. 12, p. 236,  
# 25539

AUTHORS: Samoylo, K.A., Talanina, N.V.

TITLE: An Additional Error in Measuring Phase Difference Arising in Frequency Multipliers

PERIODICAL: Tr. Moskov. energ. in-ta, 1958, No. 31, pp. 55-68

TEXT: The error of measuring phase difference is considered which arises in frequency multipliers due to their inaccurate tuning. The analysis is carried out in the phase plane for the case of a small cut-off angle of anode current. The law of the error accumulation in a chain of multipliers is considered. Phase meter circuits are given which make possible to carry over a given error in the spread of indications (a systematic error into a random error). It is shown that the least error takes place when a chain of push-pull frequency doublers is used. K.A.S. *SB*

Translator's note: This is the full translation of the original Russian abstract

Card 1/1

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

YANINA, N.V.

Establishment of the phase of oscillations at the output of  
a tuned amplifier during the switching of the input signals.  
Izv. vys. ucheb. zav., radiotekhn. 7 nesl.:105-109 Ja-F'64.  
(MIRA 17:5)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1"

- 15(8), 18(0)

SOV/22-59-3-19/25

AUTHOR: Talanker Ye.I., Engineer

TITLE: The Use of Type AST-T Plastic in the Foundry Production

PERIODICAL: Liteynoye proizvodstvo, 1959, Nr 9, pp 44-45 (USSR)

ABSTRACT: The principal materials used up to now for preparing of foundry modelling stock are aluminum alloys. A group of engineers of the Khar'kov Plant of Dental Surgery Materials Ye.G. Aronov, V.D. Bezuglyy - Candidate of Chemical Sciences, A.A. Shturman, L.N.Mats, M.Ya.Solomonov, and others have proposed the use of self-setting plastic AST-T for preparing of modelling stock and repairing of castings defects. The plastic possesses a higher abrasive stability than the models made of aluminum alloys. The manufacturing process of plastic models is very simple. The master model is made of wood or metal; it serves for preparing of a press-mould which can be made of gyps, alabster, cement or similar materials (Fig 1). AST-T is prepared by mixing a powder (polymere) and a liquid (monomere) in ratio

Card 1/2

SOV/128-59-9-19/25

The Use of Type AST-T Plastic in the Foundry Production

2:1 by weight. Having been mixed, it stays for 10-15 minutes in a closed vessel until it will not stick to the hands. It is then put into the mould and undergoes during 10-15 minutes a pressure of 50-70 kg/cm<sup>2</sup> at a temperature of 20°-30°C. The cost of plastic mass models is lower than that of aluminum ones. They are particularly suitable for a small-serial production where the use of steel moulds is not economically expedient. There are 1 table, 2 diagrams and 2 photographs.

Card 2/2

TALANKER, Ye.I.

Modernized, model 287, sand slinger. Lit.proizv. no.2:42-43 F  
'60. (Coremaking) (Foundries--Equipment and supplies)  
(MIRA 13:5)

TALANKER, Ye.I., inzh.

Over-all mechanization of the manufacture of heating radiators.  
Mashinostroenie no.4:47-49 Jl-Ag '63. (MIRA 17:2)

1. Ukrainskiy gosudarstvennyy proyektno-tehnologicheskiy i eksperimental'nyy institut.

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

TALANKER, Ye.I.

Overhead foundry conveyor. Lit. prezv. no. 3:36-38 Ag '63.  
(MIRA 16:10)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1"

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

TALANKER, Ye.I., inzh.

Automatic feeding of flasks. Mekh. i avtom. proizv. 17 no.5:  
7-8 My '63. (MIRA 16:6)

(Kharkov--Foundries--Equipment and supplies)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1"

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

TALANKEV, V. I., et al.

Automatic control and regulation of thermal processes in a  
cupola furnace, Nefth. i avtom. preizv. 19 no. 2:2-6 S '64.  
(MIRA 17:11)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1"

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

TA'ANKER, Ye.I., Inzh.

Automatic charging of cores into a vertical conveying drying unit. Mekh. i avtom. proizv. 19 no.8:7-10 Ag '65.  
(MIRA 16-4)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1"

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

TALANKIN, Ye.I.

Economic efficiency of the reorganization of small production  
foundries. Biul. tekhn.-ekon. inform. Gos. nauch.-issl. inst.  
nauch. i tekhn. inform. 18 no.10:53-54 G '65. (MIRA 18:12)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1"

TALANKIN, P.

Extinction of fires in tanks. Pozh.delo 5 no.8:23 Ag '59.  
(MIRa 12:12)

1. Nachal'nik Upravleniya pozharnoy okhrany Altayskogo  
krayispolkoma.  
(Altai Territory--Petroleum industry--Fires and fire prevention)

TALANKIN, P.

Permanent representative for fire prevention. Pozh.delo 6  
no.1:32 Ja '60. 'MIRA 13:5)  
(Altai Territory--Fire prevention)

SC 175-200-100-10

AUTHORS: Shtenshteyn, A. I., Tarunov, A. N., Richev, Ya. I.

TITLE: Concerning the Mechanism of Hydrogen Exchange Between Aromatic Compounds and Bases (Factors of Partial Rate of Deuterium Exchange Between Diphenyl Ether and Potassium Amide in Liquid Ammonia)

PERIODICAL: Zhurnal obshchey khimii, 1950, Vol 30, No 8, pp 593-609  
(USSR)

ABSTRACT: This paper describes the determination of factors of partial rate of exchange of o-, m-, and p-hydrogen atoms of diphenyl ether and methoxybenzene with potassium amide in liquid ammonia at low temperatures. The apparatus and procedure used were described previously (A. I. Shtenshteyn, Ye. N. Zvyaginseva, DAN SSSR, 117, 357, 1957; A. I. Shtenshteyn, ZnKh, 15, 216, 1957). The following reagents were used: diphenyl ether, distilled under vacuum over sodium, mp 54°, bp 157°; 1,2,4,6,6'-hexadodecaphenyl ether was prepared by dissolving

Card 1, 3

Investigating the Mechanism of Hydrogen Exchange Between Aromatic Compounds and Deuterium Part I (Partial Rate of Deuterium Exchange Between Diphenyl Ether and Potassium Acide in Liquid Ammonia)

Chernyak and Tj

aliphatic ether in liquid D<sub>2</sub>O; the deuteration of benzene was done according to reaction ND<sub>3</sub> + KND<sub>2</sub>; 2,4-d-tri-

-deuteriomethoxybenzene was described previously (A. I. Shurenshteyn, A. V. Vedeneyev, ZnKh, 78, 2614, 1938). It was found that there is a linear dependence between the log of factors of partial rate of deuterium-exchange of  $\alpha$ -hydrogen atoms in benzene derivatives and the negative log of ionization constants in water of acetic acid derivatives with the same substituents. The rate of isotopic exchange of  $\alpha$ -hydrogen atoms in benzene derivatives is determined by the acidity of the CH-bonds, which depends on its polarization resulting from the inductive effect of the substituent. The rate of hydrogen exchange with organic bases is to a considerable degree, determines by the degree of C-H bond cleavage in phenols, determined by the distribution of protons by sites. There are 3 figures;

cont. 2

Concerning the Mechanism of Hydrogen Exchange Between Aromatic Compounds and Bases (Factors of Partial Rate of Deuteration exchange Between Diphenyl Ether and Potassium Amide in Liquid Ammonia)

77395  
S0779-30-2 46,75

6 tables; and 15 references. A U.S., & U.K., 2 German, 9 Soviet. The U.S. and U.K. references are: G. E. Hall, R. Piccinni, J. D. Roberts, J. Am Chem Soc., 77, 4540 (1955); H. C. Brown, D. H. McDaniel, O. Höffiger, in book, "Determination of Organic Structure by Physical Methods," ed. by A. E. Braude, F. C. Nachod; D. Bryce-Smith, J. Chem Soc., 1954, 1079; D. Bryce-Smith, V. Gold, D. P. N. Batchell, J. Chem Soc., 1954, 2743.

ASSOCIATION: L. Ya. Karpov Institute of Physical Chemistry (Fiziko-khimicheskiy institut imeni L. Ya. Karpeva).

SUBMITTED: February 6, 1959

Card 5/3

TALANOV, Aleksandr Viktorovich; MALININA, G., red.; KORNEYEVA, V., tekhn.  
red.

[In the land of white nights] V strane belykh nochei. [Moskva]  
Izd-vo TsK VKSM "Molodaia gvardiia," 1957. 220 p. (MIRA 11:4)  
(Karelia--Description and travel)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

TALANOV, A. V.

Book: Sound Reconnaissance for Artillery, 400 p. Moscow, Voyenizdat (1948)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1"

TALANOV, Aleksandr Viktorovich; GLADKOV, T., red.; KIRILLINA, L.,  
tekhn.red.

Nansen. Moskva, Izd-vo TsK VLKSM "Molodaia gvardiia," 1960.  
301 p. (Zhizn' zamechatel'nykh liudei. Seriia biografii,  
no.8 [298]) (MIRA 13:11)

1. Chlen Soyuza sovetskikh pisateley i chlen Soyuza zhurnalistov  
SSSR (for Talanov).  
(Nansen, Fridtjof, 1861-1930)

28382

S/124/61/CCC/008/033/042  
A001/A101

11.7206

AUTHOR:

Talantov, A. V.

TITLE:

Burning time in turbulent flow of a homogeneous mixture

PERIODICAL: Referativnyy zhurnal. Mekhanika, no. 8, 1961, 77, abstract 8B532  
(V sb. "3-ye Vses. soveshchaniye po teorii gorenija T. I". Moscow,  
1960, 86-90)

TEXT: The author analyzes qualitatively the burning time of a homogeneous mixture in turbulent flow from the viewpoint of the concept of surface turbulent burning. He is of the opinion that temperature pulsation effect on the process of turbulent burning is a confirmation of the surface mechanism of this kind of burning. The author assumes temperature pulsations to be rectangular, i.e., that they alternate equally in duration and in magnitude of temperature increase and decrease relative to the average value, and moreover, that they are constant for each interval. Since the temporary course of a temperature curve is inseparable from equations of a chemical reaction, the author holds that a rigorous solution of such a problem is not very likely at present. To phenomena of turbulent burning, which are affected by the accelerating influence of temperature

Ca

Card 1/2

28351  
S/124/61/000/007/019/044  
A052/A101

26-2135

AUTHOR: Talantov, A. V.

TITLE: Calculation of a cylindrical straight-flow combustion chamber with ignition on the flow axis

PERIODICAL: Referativnyy zhurnal. Mekhanika, no. 7, 1961, 27, abstract 7B:72  
(V sb. "3-ye Vses. soveshchaniya po teorii gorenija. T. 2". Moscow,  
1960, 270-273)

TEXT: A short review of the works devoted to the calculation of the state of flame in a flow limited by walls is made. A system of equations of gas dynamics and combustion for calculating a cylindrical combustion chamber with ignition along the axis of the flow is given. When solving these equations it is assumed that the air flow in the inlet section of the chamber is a one-dimensional one. The dimensions of the ignition device are infinitesimal, the pressure is constant over the cross-section of the chamber, parameters and velocity of the flow of combustion products in the sections of the chamber are constant. The following basic equations were used for the calculation: conservation of energy for the propellant mixture, adiabatic curve, conservation of energy for combustion products, conservation of mass, conservation of momentum.  
Card 1/2

2A351 S/124/61/006/067/019/004  
Calculation of a cylindrical ... A052/A101

conservation of mass of propellant mixture, conservation of mass at the outlet of the combustion zone, propellant cut-off and also the condition of cut-off at the outlet of the combustion zone. It is assumed that the velocity and temperature of gases in the combustion zone vary linearly. At the given values of the flame propagation velocity and of the combustion time in the turbulent flow, the system of equations makes it possible to determine the state of the front and combustion zone and also to calculate the heat liberation and the pressure drop. There are 3 references.

*V. Dinyakin*

{Abstracter's note: Complete translation}

Card 2/2

27539  
S/123/01/000/014/037/045  
A004/A101

26.11.30

AUTHOR:

Talantov, A.V.

TITLE:

On the optimum operation conditions of direct-flow combustion chambers in flight

PERIODICAL:

Referativnyy zhurnal. Mashinostroyeniye, no. 14, 1961, 24, abstract  
14II180 ("Tr. Kazansk. aviat. in-ta", 1960, no. 55, 47 - 61)

TEXT: The author analyzes the connection between the flight altitude and flying speed of aircraft with ram-jet engines at a constant heat liberation in the combustion chamber. Assuming that hydrocarbon fuels are used in ram-jet engines and making use of the dependence of the combustion time in the turbulent flow suggested by K.I. Shchelkin, the author finds the length of the combustion chamber as a function depending on the gas and air temperature, height, M number of flight and other parameters. Assuming that the constancy of heat liberation means the invariability of the combustion chamber length, the author determines the relation between the M number and the altitude from which it follows that the M number should grow with an increase of the latter. Thus at a relative combustion chamber length equal to unity, the M number should grow from 1.5 to

Card 1/2

27539  
S/123/61/000/014/037/045  
A004/A101

On the optimum operation conditions ...

3.5 if altitude H increases from 10 to 60 km. It is proved that the velocity increment curve with altitude  $dM/dH$  has a universal nature for ram-jet engines operating on hydrocarbon fuel. Moreover, up to an altitude of 45 km the magnitude of  $dM/dH$  drops and rises again when an altitude of 50 km is attained. It was found that the required thrust-to-weight ratio changes only a little up to an altitude of 35 km and is in the range of 2-4. Since the deployed thrust drops with the constancy of heat liberation in the combustion chamber, this implies that ram-jet engines should have a great thrust reserve on the ground. It is pointed out that the demand of ensuring a certain acceleration magnitude  $dM/dH$  during gains in altitude, making it possible to preserve the constancy of heat liberation in the combustion chamber, is not extremely hard in comparison with other possible demands. The author concludes that the combustion process does not limit the utilization of ram-jet engines in altitudes up to 60 km at  $M \geq 3$ . There are 9 references.

4

I. Barskiy

[Abstracter's note: Complete translation]

Card 2/2

TALANTOV, A.V.

Width of the combustion area of a stationary tongue of flame  
in a turbulent flow of a homogeneous mixture on K. P. Vlassov's  
article "Design of a simple combustion chamber". Izv. vys.  
ucheb. zav., av.tekh. 4 no.2:147-157 '61. (MIRA 14:4)

1. Kazanskiy aviatsionnyy institut, kafedra teorii avia-  
dvigatelyey.

(Combustion)  
(Vlassov, K. P.)

L 41796-65  
AM5004492

EPA/EWT(m)/EPF(c)/EWP(f)/EPR/EWP(w)-2/T Pa5-4/Pab-1G/Pr-4/Ps-4 EWH/WN  
BOOK EXPLOITATION S/

Il'yashenko, Sergey Mikhaylovich; Talantov, Aleksey Vasil'yevich

44

Theory and design of direct-flow combustion chambers<sup>3</sup> (Teoriya i raschet pryamotochnykh kamer sgoraniya) Moscow, Izd-vo "Mashinostroyeniye", 1964. 0305 p. illus., biblio. Errata slip inserted. 3,500 copies printed. (TL 709.5 C7.IL5T) B+1

TOPIC TAGS: throughflow combustion chamber, ramjet engine, combustion theory, flame stabilization, fuel atomization, fuel injection, ramjet combustion chamber, turbojet, combustion chamber design

PURPOSE AND COVERAGE: This book is intended for design engineers and workers of scientific institutes; it will be also useful to students of senior courses of technical aviation schools of higher education. The authors cover the gas dynamics of the combustion chamber, the atomization of liquid fuel, the motion and evaporation of droplets, mixture formation, the position of the flame front, and flame stabilization. In calculating the throughflow combustion chamber, the authors use relationships between the injector-nozzle diameter, the length of the combustion zone, the velocity and pressure of the atomizing air, the fuel parameters and the average composition of the mixture. The authors express sincere thanks to M.M. Bondaryuk under whose direct supervision the book was written.

Card 1/3

L 31796-65  
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S.M. Ilyashenko wrote Ch. I, II, III, IV, and IX, and A.V. Talantov Ch. V, VI, VII, and VIII. There are numerous illustrations. Each chapter is followed by bibliographical references.

TABLE OF CONTENTS

Foreword -- 7

Introduction -- 9

Ch. I. Outflow and atomizing of the liquid fuel -- 14

Ch. II. Ballistics of nonevaporating droplets -- 25

Ch. III. Evaporation of droplets -- 50

Ch. VI. Calculation of fuel-air mixture concentration fields -- 83

Ch. V. Turbulent combustion theory of an uniform mixture -- 103

Card 2/3

L 31796-65

AM5004492

Ch. VI. Experimental investigation of the combustion in a flow of uniform mixture -- 148

Ch. VII. Disposition of flames in a combustion chamber -- 208

Ch. VIII. Flame stabilization -- 261

Ch. XI. Combustion of two-phase mixtures -- 283

SUB CODE: PR

SUBMITTED: 16Sep64

NO REF Sov: 114

OTHER: 057

Card 3/3

ACC NR: AP6030257

SOURCE CODE: UR/6147/66/000/003/0098/0103

AUTHOR: Zotin, V. K.; Talantov, A. V.

ORG: none

62

B

TITLE: Dependence of the flame speed in the turbulent flow of a homogeneous mixture

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 3, 1966, 98-103

TOPIC TAGS: combustion, gas combustion, burning velocity, propulsion

ABSTRACT: A study was made of the turbulent burning velocities of premixed gasoline-air flames at flow velocities of 20–100 m/sec, air excess coefficients of 1–1.6, and initial temperatures of 423–823°C. The method of direct flame cone measurement was used. The flame was stabilized with recessed flame holders and turbulence was generated with grids. The following relationships were plotted: the turbulent burning velocity vs air-excess coefficient, the combustion temperature to initial temperature ratio  $\theta$  vs turbulent burning velocity, the fluctuating velocity vs the turbulent burning velocity, and normal velocity vs turbulent burning velocity. The expression  $U_T = \theta^{0.8}$  was obtained for the turbulent burning velocity. All the experimental results could be correlated by the expression derived from the surface combustion model.

Card 1/2

UDC: 536.46

L 44063-<sup>(b)</sup>  
ACC NR: AP6030257

$$U_T/U_N - 0 = f(W'/U_N),$$

where  $W'$  is the fluctuating velocity, and  $U_N$  is the normal burning  
velocity. Orig. art. has: 9 figures. [PV]

SUB CODE: 21/ SUBM DATE: 30Oct65/ ORIG REF: 006/ OTH REF: 001  
ATD PRESS: 5079

Card 2/2 AFM

SUKHODOL, V.F.; GRABOVAY, I.A.; TALANOV, B.I.; Prinimala uchastiye:  
LYAKINA, T.V.

Content of nitrogenous substances in fusel oil. Ferm. i spirit.  
prom. 30 no.2:10-13 '64.

On the occasion of the 400th anniversary of book printing.  
Ibid., 8-9 (MIRA 18:2)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlennosti  
imeni Mikoyana.

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754730003-1"

TALANOV, D.F.

Talanov, D.I. On some questions of the theory of iteration  
of a rational function. Doklady Akad. Nauk SSSR  
(N.S.) 93, 413-416 (1953). (Russian)

A study is made of the iterates  $z_1, z_2, \dots$  of an arbitrary point  $z_0$  of the extended complex plane, generated by a given rational function  $R(z)$  ( $z_n = R(z_{n-1}) = R_n(z_0)$ ). A point  $\xi$  is a fixed point (of order  $n$ ) if  $\xi = \xi_n$  (but not  $\xi = \xi_k$  for any  $k$  in  $0 < k < n$ ). The iterates of a fixed point  $\xi$  of order  $n$  form a cycle of order  $n$ , denoted by  $(\xi)$ . Point  $z$  is a mobile point if all its iterates are distinct. A point is irregular if the family of functions  $\{R_n(z)\}$  ( $n = 1, 2, \dots$ ) is not normal in its neighborhood. The set of irregular mobile points has the power of the continuum; and the sequence of iterates of an irregular mobile point form a set dense in itself. Let  $(\xi)$  be a cycle of order  $n$ ; then a point  $z$  is called a "dislodged" point relative to  $(\xi)$  if there exists a neighborhood  $U$  of  $\xi$  containing  $z$ , and an integer  $q$ , such that  $z_{kn}$  ( $= kn$ th iterate of  $z$ ) is the highest iterate of  $z$  in  $U_{kn}$ , and is not in  $U_{(k-1)n}$ , where  $k = 1, 2, \dots, q$ . The greatest possible  $q$  is the degree of dislodgment of  $z$ . (Here  $U_j$  is the  $j$ th iterate of  $U$ .) A neighborhood of  $\xi$  is "dislodged" relative to  $(\xi)$  if each of its points is; and the union of all such neighborhoods of  $\xi$  is the region of dislodgment of  $\xi$ . It is shown that: (i) a repulsive fixed point always has a region of dislodgment; (ii) if a sequence of distinct repulsive fixed points converges, then the sequence of their regions of dislodgment converges to the point; (iii) a mobile irregular point is a point of dislodgment for an infinite set of repulsive cycles.

1/2

OVER

D.I. THIANOV

The remainder of the work deals with "partial limits" and "multiple convergence". An isolated limit point of a sequence is a partial limit of the first class, and a partial limit of  $p$ th class is a limit point of partial limits of arbitrary class  $< p$ . A sequence whose limits of  $p$ th class form a finite set is a sequence of  $p$ th class. It is shown that a sequence of iterates is either of first class or of infinite class. A sequence of  $p$ th class is  $p$ -multiply convergent to  $s$  if  $s$  is the unique partial limit of class  $p$ . Given a repulsive fixed point  $\xi$ , there is an irregular mobile point  $s$  such that for each  $p$  some subsequence of iterates of  $s$  is  $p$ -multiply convergent to  $\xi$ .

I. M. Sheffer (State College, Pa.).

3

2/2

ФРОГИЧЕНЬ, А.А.; ГУДКОВ, О.А., старший научный сотрудник; МИЛЯНЕН, Л.Е.,  
старший научный сотрудник; ТИКНАНЬ, Д.Р., старший научный сотрудник;  
НЕТИКИН, Л., инж.

Review and bibliography. Veterinariia 41 no.12:96-100 p.14.  
(МИР 18:9)  
Leningradskiy zoolokhnozaystvennyy institut (for U.S.S.R.).

VALAEV, S.A., starshiy nauchnyy sotrudnik.

Applying early chemotherapy in Hypodermic infestation of cattle. Veterinariia 42 no.11:47-48 N '65.

(NIMA 19:1)

L. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy saniatii.

IVASHKOV, I.S., starshiy nauchnyy sotrudnik; TALANOV, G.A., starshiy  
nauchnyy sotrudnik

Use of chlorophos and dimethylidichlorovinyl phosphate  
preparations for controlling warble fly infestation.  
Veternaria 42 no.9:55-56 S '65.

(MIRA 18:11)

I. Vsesoyuznyy nauchno-issledovatel'skiy institut  
veterinarnyy sanitarii.

RAYEVSKIY, D.A.; NEPOKLONOV, A.A., kand. biol. nauk; IVASHKOV, I.S.,  
starshiy nauchnyy sotrudnik; TALANOV, G.A., starshiy nauchnyy  
sotrudnik; PETRYAKOV, Ya.A.; USPENSKIY, P.A.

Composite method for controlling Hypoderma infestation. Veteri-  
nariia 42 no.12:37-41 D '65. (MIRA 19:1)

1. Nachal'nik veterinarnogo otdela Oblastnogo upravleniya sel'skogo  
khozyaystva Tul'skoy oblasti (for Rayevskiy). 2. Vsesoyuznyy  
nauchno-issledovatel'skiy institut veterinarnoy sanitarii (for  
Nepoklonov, Ivashkov, Talanov). 3. Zaveduyushchiy Baykhorskim  
veterinarnym uchastkem (for Petryakov). 4. Nachal'nik Nizhne-  
ilimskoy stantsii po bor'be s boleznyami zhivotnykh, Irkutskaya  
oblast' (for Uspenskiy).

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CIA-RDP86-00513R001754730003-1

TALANOV, I.A.; SEMENOV, V.A.

Introducing standards for mechanical drawing systems.  
Standartizatsiia 28 no.1:38-41 Ja '64. (MIRA 17:1)

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CIA-RDP86-00513R001754730003-1"

THA 100, N.D.

AUTHORS: Cerevitskiy, P.F., Evenchik, G.I., Vasil'evich, S.I., Postnikov N.N., Sidel'kovskiy, L.V., Guryain, A.P., Konshov, V.A., Telenov, M.D., Tomayev, A.A. and Rezen, R.Ye. SD7/19-53-6-83/695  
TITLE: A Cyclone Kiln for De-Fluorinating Phosphates (Tsirkonnyaya pech' dlya obesfitorivaniya fosfatov)  
PERIODICAL: Byulleten' izobreteniy, 1958, Nr 6, p 26 (SSSR)  
ABSTRACT: Class 12g, 2.0. Nr 113911 (576179 or 23 Jun 1957). Submitted to the Committee for Inventions and Discoveries at the Ministers Council of USSR. A cylindrical kiln with an aperture for intake of the material to be processed, and the injector nozzles; with additional injector nozzles mounted at different heights in the wall of the kiln, and with a cylindrical column made of fireproof material built into the bottom portion. The design achieves better circulation of the suspended phosphate particles and separation of the molten of the smelt.

Card 1/1

L 17191-63

ACCESSION NR: AR3004189

EWP(q)/EWT(m)/BDS

AFFTC

JD

S/0081/63/000/009/0423/0423

SOURCE: RZh. Khimiya, Abs. 9L67

57

AUTHOR: Talanov, N.D.; Mikhaylin, A.D.; Yezhova, A.M.; Livshits, S.I.;  
Loktyukhin, T.A.TITLE: Production of high-purity phosphorus 21

CITED SOURCE: Tr. po khimii i khim. tekhnol., (Gor'kiy), vy\* p. 1, 1962, 159-164

TOPIC TAGS: red phosphorus, yellow phosphorus, purity, vacuum distillation,  
phosphorusTRANSLATION: The process of purification of technical commercial red phosphorus from impurities of mineral acids in small concentrations was studied. The non-equivalent action of 3 and 5% HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, and HCl or their mixtures, taken in equal amounts, was demonstrated at 70-95°. Two treatments of red phosphorus with acid for periods of 12 hours, followed by washing with distilled water and drying, successfully purify phosphorus from a total content of the impurities to be determined up to 2·10<sup>-2</sup>-5·10<sup>-3</sup>%. The process of vacuum distillation of

Card 1/2

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ACCESSION NR: AR3004189

O

technical yellow phosphorus, preliminarily purified of acid, in glass apparatus at a residual pressure of  $1 \cdot 10^{-2}$ - $1 \cdot 10^{-4}$  mm of mercury, followed by its polymerization to the red modification was studied. Phosphorus containing a sum of the impurities to be determined equal to  $5 \cdot 10^{-4}\%$  and lower is obtained by the method of two to three distillations. Spectrally pure phosphorus is obtained by the method of four distillations. No influence of the depth of the vacuum in the range  $1 \cdot 10^{-2}$ - $1 \cdot 10^{-4}$  mm of mercury or of the variety of glass on the quality of the final product was noted. From the authors' summary.

DATE ACQ: 19Jun63

SUB CODE: CH, EL

ENCL: 00

Card 2/2

L 41063-65 EWT(m)/EWP(b)/EWP(t) IJP(c) JD  
ACCESSION NR: AR5005873

S/0081/64/000/023/V138/V138

14

B

SOURCE: Ref. zh. Khimiya, Abs. 23V13

AUTHOR: Chernykh, V. Ya.; Talanov, N.D.; Smirnova, I.N.

TITLE: Synthesis of high-purity phosphorus trichloride

CITED SOURCE: Tr. po khimii i khim. tekhnol. Gor'kiy, vyp. 2(8), 1963, 220-224

TOPIC TAGS: phosphorus trichloride, phosphorus purity, chlorine purity

TRANSLATION: A method was developed for preparing high-purity  $\text{PCl}_3$  by synthesis from elemental P and  $\text{Cl}_2$  with a content of total measurable impurities of  $1.2 \times 10^{-4}\%$  and below. A laboratory apparatus was developed which permits the synthesis of  $\text{PCl}_3$  and its distillation to be carried out simultaneously under conditions of high experimental purity. Experiments showed that the principal role in the synthesis of high-purity  $\text{PCl}_3$  is played by the quality of the starting products. The usual subsequent double distillation of the  $\text{PCl}_3$  is ineffective in improving the quality of the preparation. Authors' summary

ENCL: 00

SUB CODE: IC

Card 1/1 CC

L 4091-66 EWT(m)/EWP(t)/EWP(b) LJP(c) JD

ACC NR: AP5026487

SOURCE CODE: UR/0286/65/000/019/0016/0016

16  
B

INVENTOR: Chernykh, V. Ya.; Talanov, N. D.; Gerasimova, V. D.

ORG: none

TITLE: Preparation of indium phosphide. Class 12, No. 175049 [announced by Scientific Research Institute of Fertilizers, Insecticides, and Fungicides (Nauchno-issledovatel'skiy institut udobreniy i insektofungitsidov)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 19, 1965, 16

TOPIC TAGS: indium phosphide, inorganic synthesis

ABSTRACT: An Author Certificate has been issued for a preparative method for indium phosphide involving the heating of metallic indium with phosphorus trichloride. To increase the yield and improve the purity of the end product, the reaction is conducted at 700—750°C with subsequent cooling of the reaction mixture to room temperature. [BO]

SUB CODE: IC,GC/ SUBM DATE: 13Jan65/ ORIG REF: 000/ OTH REF: 000/ ATD PRESS: 4/28

BUK

Card 1/1

UDC: 546.682

546.181.1.07

ACC NR: AP6025696

(A)

SOURCE CODE: UR/0078/66/011/005/0971/0976

AUTHOR: Chernykh, V. Ya.; Talanov, N. D.

CLASS: none

TITLE: Synthesis of high-purity indium phosphide

SOURCE: Zhurnal neorganicheskoy khimii, v. 11, no. 5, 1966, 971-976

TOPIC TAGS: indium compound, phosphide

ABSTRACT: A relatively simple and safe method of preparing indium phosphide from indium metal and phosphorus trichloride is described. The reaction is  $2\text{In} + \text{PCl}_3 \rightarrow \text{InP} + \text{PCl}_5$ . The InP is obtained in a highly pure form by using pure reactants and distilling off InP following the reaction. A study of all the possible factors which can affect the yield of InP showed that the highest yield of InP (77-78% of theoretical) is obtained under the following reaction conditions: vertical position of ampoule during and after the reaction; initial rate of heating of the reactants 500-600 deg/hr; rate of cooling of furnace with ampoule after the reaction 50-55 deg/hr; ratio of reactants In:PCl<sub>3</sub> = 1.8:1; duration of reaction 50-60 hr; temperature 700±0.5°C. InP thus produced is in the form of a dense polycrystalline ingot consisting of a single phase. X-ray analysis showed the crystals to have a zinc-blende-type face-centered cubic lattice with  $a_0 = 5.866 \text{ \AA}$ . Orig. art. has: 5 figures and 4 tables.

SUB CODE: 07/ SUEM DATE: 17Oct64/ ORIG REF: 008/ OTH REF: 018  
Card 1/1 UDC: 546.682:181.07